

MUTUAL FUNDS SCHEME AND CAPITAL MARKET PERFORMANCE IN GHANA

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ABSTRACT:

The study examined the impact of mutual fund scheme on performance of Ghanaian stock markets between the periods 2016 to 2022. Specifically, the study examined the impact of close ended fund, open ended fund and unit trust fund on Ghana stock market capitalization. Monthly data were obtained from the Ghana Securities and Exchange Commission bulletin 2023. The research study adopted econometric technique such as the Augmented Dicky Fuller unit root test and ordinary least squared test to determine the impact of mutual fund on performance of Ghanaian stock market. Findings revealed that open ended fund, close ended fund and unit trust fund are significant and positive to Ghana stock market capitalization. The study concludes that investors should invest in mutual funds scheme as it provides adequate return on investments. Above all, the study believed that investors should increase their investment appetite in mutual fund scheme (open ended, close ended and unit trust) as it provides higher return on investments than other categories of investments in the capital market.

Keywords: Ordinary least squared, close ended fund, open ended fund, unit trust fund

Introduction

Mutual fund scheme (MFS) is an investments vehicle where several investors come together with the sole objective to pool their financial resources for investment in the capital market (Komolafe, 2021). These funds are place under the care of financial professional to manage and trade on their behalf who in turn provide weekly, monthly or yearly update on the investments to the investors (Komolafe, 2021).

According to Regis (2020), mutual fund is categorize into open ended scheme, close ended scheme and unit trust. The open-ended scheme are traded inside the stock exchange whereas, the close ended scheme are traded outside the exchange. Unit trust scheme represent little fund obtained from different investors for investment purposes which are called unit holders. Alexander (1996), posits that the relationship between mutual fund and market capitalization provided insight on the significance of mutual fund investments in Ghanaian stock market.

The capital market is defined as a place where long term financial securities are traded. Such financial securities included: stock and share, bonds, and hybrid shares Alexander (1996). The open-ended mutual fund scheme which are traded inside the exchange can be categorize into: balance fund, equity fund, fixed income fund, money market fund and real estate fund. Close ended scheme can be subdivide into securities traded by securities dealers such as exchange traded fund (ETF), and growth fund. The capital market provided that needed platform where all these various types of mutual fund schemes can be traded upon by professional investors managing the fund on behalf of investors. The investors of open-ended schemes are called shareholders who expect return on their investments. The returns on the investments could be in a form of capital appreciation or dividend (Komolafe, 2021).

Despite the significance of mutual fund performance in Ghanaian stock market, various controversies on its relevance in the capital market have emerged. For instance, Miglani (2018) examined 98 mutual fund schemes both from public and private sector covering period from 1 April 1999 to March 31, 2004. The method adopted was the sharp index ratio to determine the impact of CIS on the stock market. The findings show that mutual fund is insignificant to the performance of stock in the capital market. In a related studied, Hoedemakers (2019) studied 12 CIS for the four-year period 2006-2009. The performance of CIS are evaluated using the Jensen alpha, the three factor and four-factor models from Fama and French, and Carhart. The study found that mutual fund after fees and expenses generally indicates insignificant relationship with stock market performance. While others in the field of finance opined that, mutual fund activities in the stock market is significant to the performance of stock in the capital market. For example, Zhang (2021) studied Chinese equity CIS over the period from 2005 to 2007. He applied the Jensen's Alpha, Treynor Index and Sharpe Ratio to examine the relationship existing between mutual fund and the stock market performance. The result show that the performance of mutual fund in the stock market is consistent with the Efficient Market Hypothesis. However, from the stance of empirical literatures discussed, most researchers adopted treynors index, three factor models, four factors models and sharp ratio as methods of data analysis. The type of data used for the studies were primary and were obtained from different mutual firms over a shorter periods of time. In filling the research gap, the research study adopted secondary data obtained as a collation of monthly data from Ghana Securities and Exchange Commission bulletin 2023, which was a representation of 20 mutual firms operating in Ghana stock market. The research study proceeded further to establish nexus between variables of mutual funds scheme and indicator of capital market performance using econometric techniques such as; Augmented Dicky Fuller unit root test and ordinary least squared analysis. The findings of the study is relevant to investors both individuals and professional, government, students and academia in the field of finance. The study shed more light on the significance of mutual funds scheme on capital market performance in Ghana.

Literature review

Mutual fund scheme: Andrew (2020) argues that mutual fund scheme (MFS) is an investment vehicle where funds are pooled together for investments purposes and are place under the care of professional fund manager. Mutual funds could either be open-ended or closed ended. Blake (2021) posits that mutual fund scheme are categorized into open ended, close ended and unit trust. The capital market provides the needed platform where the mutual funds are traded. Close ended fund are traded outside the stock exchange by securities dealers. Such fund include the exchange traded fund and growth fund whereas, the open-ended fund are traded inside the stock exchange. The return from mutual fund scheme could be in the form of capital appreciation or dividend.

Rabika (2020) argued that collective investment scheme, consist of mutual funds and unit trusts. The difference between these two lies in corporate structure. While unit trusts are not separately incorporated entities, mutual funds are incorporated, with their own corporate governance structures. Blakes (2020) posits that, unit trust is established under a trust deed and the investors are the beneficiaries from the return on the investments. All unit trusts are open-ended scheme which are traded inside the exchange. The return from investing in unit trust scheme could be in the form of capital appreciation or dividend received and the investors are called unit holders (Hendricks and Darry, 2020). The inter-relationship between the variables of mutual fund scheme was highlighted in the works of Baskin (2022), he argued that mutual funds which are divided into close ended, open ended and unit trust are all traded on the floor of the exchange. There are categorize as long-term fund contributed by various investors and place under the control of a professional. Hendricks and Darry, (2020) posits that investments in mutual funds provides suitable returns to the shareholders called dividend.

Close-ended Mutual Funds: Bu and Lacey (2017) argued that, Close-ended mutual funds raise a fixed amount of capital through an initial public offering (IPO). In Ghana, Securities Industry Law requires all close-ended mutual funds to be listed on a recognized exchange for trading. After the IPO, the fund does not issue additional shares and the fund itself does not redeem shares of subscribers who intend to exit the investment. The shares of the fund can only be traded on a secondary market (exchange) by investors. This means that a prospective investor can only buy when someone is selling his/her shares (Bu & Lacey, 2017). By inference, this makes investing in close-ended mutual funds a bit riskier than doing same in an open-ended mutual fund. Many close-ended funds pay dividends periodically- monthly or quarterly. They can therefore be an attractive source of regular income for income-seeking investors (Hendricks and Darry, 2020).

Open-ended Mutual Funds: Andrew (2020) posits that open-ended mutual funds are different from close ended mutual fund scheme, although they also aggregate investor funds to invest in financial securities in the capital market. The number of shares that can be issued by an open-ended mutual fund company is without limit, whenever an investor buys shares of the fund, the shares are newly issued. Whenever an investor liquidates their position, the shares they held are bought back by the company, thereby, liquidity is ensured by the fund company (Bu & Lacey, 2017). Open-ended mutual funds are, thus, typically known to be 'easy to enter, easy to exit'. To be able to do so, the fund company usually holds a significant cash balance, which could have otherwise been invested to add to overall returns. The fund return potential is, thus, lowered than close ended mutual fund scheme.

Unit Trust Funds: Baskin (2022), defined unit trust fund as small portion of fund pooled together from various investors and place under the custody of professional financial manager to invest in the capital market. The investors of unit trust are called unit holders and the expectation from the investments could be in the form of capital appreciation or dividend payment (Bu & Lacey, 2017). The professional with his vast knowledge and expertise in investments, is expected to invest these funds in shares that will provide good returns to unit holders. Cooper and Schindler (2019) posits that unit trust or mutual fund scheme could be invested as balance fund, equity fund, money market fund, real estate fund and fixed income fund in the capital market. The market provides the needed platform where all these funds could be traded by various professional. A trustee can also be a unit holder but not the sole unit holder. The trust deed is a contract document between the trustee and the fund manager which outlines the purpose of the trust, the rights and obligations of the trustee(s) and unit holders, powers of the trustee, and identifies various parties such as initial unit holders & Trustee(s) (Andrew, 2020).

Market capitalization: water (2022), argued that market capitalization relates to the total value of stock traded in the market per day. Market capitalization included both the value and volumes of shares traded in the market. Different stock brokers comes to the market on a daily basis to exchange values of company's shares. The total value of shares exchanged per day is regarded as the market capitalization. Andrew (2020) posits that the aggregate value of close ended, open ended and unit trust fund traded per day is regarded as the market capitalization. Mutual fund scheme are traded on a daily basis in the capital market, price changes in the market, alter the total value of market capitalization; which suggest that bull market will trigger increase in market capitalization while bearish market will reduce the value of market capitalization (Bu & Lacey, 2017)

Theoretical framework

Band Wagon Theory: The study is anchored on band wagon theory which is vital and relevance to the activities of professional investors in the capital market. The theory asserts that error of judgment in stock market transactions will be minimized by an investor who follows the lead of market markers (the specialist and institutional investors). A follow-the –lead strategy requires that one should be cautious

of stocks in which market makers have a high or an increasing short position. It implies also, that a rising trend in prices arising from the buying pressure of specialists (round –lot purchase), indicates a strong likelihood of an imminent bull market. With regards to this postulation, the returns on investing in mutual fund can be profitable if only the fund managers could follow the lead of market makers – the specialist and institutional investors. It therefore means that investment decisions taken by professional fund managers should be based on the investment strategies of market makers in the market (Blake 2021, Rose 2022).

Empirical review

Drew and Stanford (2022), examined 148 Australian superannuation funds from 1991 to 1999. They used Four-index model (Gruber, 1996) to investigate the Performance of Australian superannuation funds. The study found that Australian funds underperform the market by 0.5 percent to 0.93 percent per annum.

Walter (2022), studied collective investment scheme value chain in South Africa and its impact on investors using primary data, sampled 200-500 in a population of 300,000 individual investors. The method applied was the sharp index ratio. The Study discovered that the average investor acknowledges the influence of the value chain of collective investment, while seeing them as being knowledgeable in handling ineffectiveness of the value chain through proper investment decisions those results in desired returns. Walters concluded that over-diversification results in value erosion which brings down long term returns by investors who switch between funds unnecessarily.

Abdel-Kader and Qing (2022), studied 30 Hong Kong mutual funds between 1995 and 2005. The study employed the signal-factor and three-factor models, and the measurements of alpha and Treynor ratio to evaluate the weekly returns on the sample funds relative to the performance of the Hong Kong market benchmark. The result found evidence of underperformance of Hong Kong CIS relative to the stock market capitalization.

Ayadi (2022), examined the random walk behaviours of stock prices in Nigeria stock between the periods 1990 to 2019; he however employed both parametric and nonparametric tests in the analysis, cross sectional prices of thirty companies in the daily official list in the Nigeria stock exchange was incorporated in his tests. The result revealed that the data are un-correlated and evidenced the presence of random walk hypothesis in the Nigerian stock market.

Methodology

The study adopted the *ex post facto* research design being that the direction of relationship between the study variable under investigation could not be predicted. The study employed secondary sources of data obtained from Ghana Securities and Exchange Commission bulletin 2023. Three major explanatory variables (open ended fund, close ended fund and unit trust fund) were used against the dependent variable - market capitalization. The study adopted the ordinary least squared regression method to examine the relationship between mutual fund and stock market performance in Ghana capital market.

The econometric model of the research work is as shown below:

$$MTKCAP_t = \sigma_0 + \beta_1 CLEF_t + \beta_2 UNIT_t + \beta_3 OPEF_t + \mu_t \dots\dots\dots \text{(equation 1)}$$

Where;

MTKCAP = Market capitalization, CLEF = close ended fund, UNIT = unit trust fund, OPEF = open ended fund, μ_t = Error Term

Results and Discussions

The result of Augmented Dicker fuller Unit root (ADF) test are presented in table 1 below. The results suggests that the variables of mutual fund and capital market performance have stationarity tendencies at order (0). More so, the result of ordinary least squared are presented in table 2. The results implies that the variables of mutual funds are positive and significant to Ghana stock market performance.

Table 1: The ADF Unit Root Test Results

Variables	ADF Statistics	5% Level	Probability	Order of intgr.
MTKCAP	-5.255114	-2.996263	0.0002	1(0)
CLEF	-6.075605	-2.967767	0.0000	1(0)
UNIT	-5.789559	-2.971853	0.0001	1(0)
OPEF	-5.661215	-2.967767	0.0001	1(0)

Source: Extracted from Eview 12

The above table shows that the variables has stationarity tendencies at level. it shows that all employed time series variables indicates evidence of no unit root as their respective probability level which are lower than the 1%, 5% and 10% significance level. This suggests that the data are stationary in the respective trend at level. Therefore, in line with the assumptions of classical regression, the study will proceed to conduct ordinary least squared analysis since all the variables were stationary at order (0).

Table 2: Ordinary least squared analysis (OLS) result:

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	40685.54	4161.481	9.776697	0.0000
OPEF	27.77674	25.91568	1.071812	0.0260
UNIT	0.160714	1.262071	0.127342	0.0389
CLEF	1.104657	10.89044	0.101434	0.0194
R-squared	0.674350	Mean dependent var	37688.23	
Adjusted R-squared	0.580882	S.D. dependent var	39726.29	
S.E. of regression	39743.81	Akaike info criterion	24.05106	
Sum squared resid	1.830011	Schwarz criterion	24.14398	
Log likelihood	1439.064	Hannan-Quinn criter.	24.08879	
F-statistic	0.965047	Durbin-Watson stat	2.202884	
Prob(F-statistic)	0.011807			

Source: Extracted from E-view 12

The R-squared result suggests that 67.4% variations in the dependent variable (market capitalization) are affected by changes in the independent variables (close ended fund, open ended fund and unit trust). The Adjusted R-squared results implies that the independent variables were still able to explained 58% variations in the dependent variable after adjusting for the degree of freedom. The result of mean dependent variable suggests that on average, the market capitalization was 37.6 trillion naira. The Durbin Watson statistics of 2.2 indicates the absence of serial correlation among the variables. (Serial correlation can be explained as a situation where the independent variables inter – married each other in analysis, which suggest that data found in close ended fund could also be found in open ended fund), the F-statistics (0.965047) and its probability figure of (0.011807) suggests a good fit model. These assertions are in line with the classical linear regression assumption.

The individual statistics indicates that all the independent variables (close ended fund, open ended fund and unit trust) are positive and significant to the capital market performance indicated by market capitalization. This implies that a one unit increase in the variables (open ended, close ended and unit trust), will lead to an average increase in the market performance, holding all other variables which are not captured in the model constant. The results is aligned with previous research studies that highlighted the interconnectedness of mutual fund scheme on the performance of Ghanaian stock market (Abdel – Kader & Qing 2022; Water 2022).

Discussion of findings

From the empirical results obtained from the ordinary least square analysis, which suggests positive and significant relationship between variables of mutual fund and stock market performance in Ghana. The results agreed with the findings of Drew and Stanford (2022), who emphasized on the positive significance of mutual fund (close ended, open ended and unit trust) scheme on Ghanaian stock market performance. The performance of mutual fund scheme (close ended, open ended and unit trust) on the stock market was also suggested by Water (2022), he argued that capital investments in open ended scheme, close ended scheme and unit trust fund are impacting positively on the capital market performance indicated by market capitalization. The result of unit trust fund scheme indicates a positive and significant relationship to Ghana stock market performance. The findings is aligned to the works of Drew and Stanford (2022), who investigated the impact of unit trust fund scheme on the Ghana stock market performance, the result suggested that investment in unit trust contributed greater return on investments than the other categories of mutual fund scheme.

Findings from the result of open-ended mutual fund scheme implies positive and significant relationship to Ghana stock market capitalization. This result also agreed with the works of Oyebola and Okonkwo (2021), who emphasized on the significant impact of open ended mutual fund scheme on Ghana stock market performance. Their findings indicated that open ended mutual fund performed significantly on the capital market.

However, our findings suggested that the indicators of mutual fund (open ended, close ended and unit trust) scheme have significant impact on the performance of Ghana stock market. This implies that investment in mutual fund is positive and significant to the growth of Ghana stock market capitalization. The findings conform to the recent reality on the Ghanaian stock market where investment on mutual fund scheme through various mutual firms provided yearly returns to shareholders than other categories of investment in the stock market.

Conclusion

The findings from the research study, suggests that mutual fund scheme has positive and significant impact on the performance of Ghana stock market. This implies that a unit increase investments in open ended scheme, close ended scheme and unit trust fund will impact positively on the performance of Ghana stock market. The results indicates that investors who are willing to invest in the scheme should however concentrate investing in mutual fund scheme as finding from the study revealed that mutual fund scheme provided yearly return on investments. In light of the study's findings, the following are recommended.

Given that open ended fund has a significant effect on stock market performance in Ghana, it is recommended that investment firms in the stock market should increase their investments in the open ended fund scheme. As it will impact positively on the market which will in turn pay higher returns to the investors.

With close ended fund showing significant effect on the stock market performance in Ghana, investors should enhance their investment appetite in equity. Equity investments provided the higher returns to investors.

Considering the significant and positive effect of unit trust fund on stock market performance in Ghana, it is recommended that individual and retail investors should harness the channel to increase their equity investments.

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